



8. (Withdrawn) A method of treatment of lung carcinoma in a patient, which method comprises administering a chemotherapeutic agent to a patient diagnosed with a small cell undifferentiated lung carcinoma, wherein the small cell undifferentiated carcinoma is distinguished from a differentiated squamous cell carcinoma by detecting an absence of p63 expression in cells from the lung carcinoma.

9. (Withdrawn) A method according to claim 8 wherein detecting p63 expression comprises detecting expression of p63 protein.

10. (Withdrawn) The method according to claim 9 wherein detecting p63 protein expression comprises detecting the p63 protein with an immunoassay.

11. (Withdrawn) The method according to claim 10 wherein the immunoassay is an immunohistochemical assay.

12. (Withdrawn) A method of treatment of carcinoma in a patient, which method comprises surgically resecting a differentiated squamous cell carcinoma from a lung of a patient diagnosed with differentiated squamous cell carcinoma lung cancer, wherein the differentiated squamous cell carcinoma is distinguished from a small cell undifferentiated lung carcinoma by detecting p63 expression in cells from the lung carcinoma.

13. (Withdrawn) A method according to claim 12 wherein detecting p63 expression comprises detecting expression of p63 protein.

14. (Withdrawn) The method according to claim 13 wherein detecting p63 protein expression comprises detecting the p63 protein with an immunoassay.

15. (Withdrawn) The method according to claim 12 wherein the immunoassay is an immunohistochemical assay.

16. (Withdrawn) A method for distinguishing a carcinoma of epithelial cells with squamous cell differentiation or squamous differentiation potential from a carcinoma without squamous cell differentiation or squamous differentiation potential, or a non-epithelial cell tumor, which method comprises detecting p63 expression in cells from a carcinoma, wherein p63 expression indicates that the carcinoma is a carcinoma of epithelial cells with squamous cell potential and the absence of p63 expression indicates that the carcinoma is a carcinoma without squamous differentiation, squamous differentiation potential, or is a non-epithelial tumor.

17. (Withdrawn) The method according to claim 16, wherein the epithelial cells with squamous cell potential are selected from the group consisting of squamous epithelia, transitional cells, and glandular epithelia:

18. (Withdrawn) The method according to claim 17, wherein the epithelial cells are glandular epithelia, and wherein the carcinoma without squamous differentiation potential is a glandular carcinoma.

19. (Withdrawn) The method according to claim 18, wherein the glandular carcinoma is a renal carcinoma.

20. (Withdrawn) A method for distinguishing a thyroid papillary carcinoma from another thyroid neoplasm, nodule, or enlargement, which method comprises detecting p63 expression in cells from a thyroid neoplasm, nodule, or enlargement, wherein p63 expression indicates that the neoplasm, nodule, or enlargement is a papillary carcinoma and the absence of p63 expression indicates that the neoplasm, nodule, or enlargement is not a papillary carcinoma.

21. (Withdrawn) The method according to claim 20, wherein the neoplasm that is not a papillary carcinoma is a follicular adenoma, a medullary carcinoma, an anaplastic carcinoma, or a Hurthle cell carcinoma.

22. (Withdrawn) A method for distinguishing a Hashimoto's thyroiditis from another thyroid inflammatory condition, which method comprises detecting p63 expression in cells from a thyroid inflammatory condition, wherein p63 expression indicates that the pathology is Hashimoto's thyroiditis.

23. (Withdrawn) The method according to claim 22, wherein the inflammatory condition is not Hashimoto's thyroiditis.

24. (Withdrawn) The method according to claim 23, wherein the inflammatory condition is Grave's disease.